

AMENDED CLAIMS

[received by the International Bureau on 26 April 2005 (26.04.2005);
original claims 1-15 replaced by new claims 1-14]

1. An electrical terminal (30), for mounting in a mounting cavity (54) in a first electrical device (50) with one open end (57) comprising:

a first contact member (32) having an outer pressure contacting end portion (32a) of a given diameter for pressure engaging a first electrical device (50) and an inner end portion (32b) of a diameter at least slightly larger than said given diameter;

a second contact member (34) having a front pressure contacting end (34a) for pressure engaging a second electrical device (62), a rear end (34b) having a hole (38) for reciprocally receiving the inner end portion of the first contact member, a restricted stop (44) at the rear end of the hole for abutting the inner end portion of the first contact member to define an outer limit position of the first contact member, an outwardly projecting bearing flange (42) for reciprocally engaging a bearing surface (54a) on the first electrical device (50);

a biasing member (36) in said hole in the second contact member and engageable with the inner end portion of the first contact member for resiliently biasing the first and second contact members in opposite directions; and

the first electrical device (50) having a housing (52) with the enclosed mounting cavity (54), the mounting cavity with a fixed contact (56) at a base (54b) of the cavity opposite said open end (57), the rear end (34b) of the second contact member (34) being reciprocally mounted in the cavity with said bearing ring (42) slidably engageable with inner walls (54a) of the cavity, the pressure contacting end portion (32a) of the first contact member (32) being biased into engagement with the fixed contact at the base of the cavity, the pressure contacting end (34a) of the second contact member (34) projecting from the housing, and the cavity has a restricted stop (58) at an open end (57) thereof for abutting the bearing ring to define an outer limit position of the second contact member projecting from the housing.

2. The electrical terminal of claim 1 wherein the outer pressure contacting end portion (32a) of said first contact member (32) is dome shaped to present a

rounded convex contact surface (46) for engaging the first electrical device (50).

3. The electrical terminal of claim 1 wherein the outer pressure contacting end (34a) of said second contact member (34) is dome shaped to present a rounded convex contact surface (48) for engaging the second electrical device (62).

4. The electrical terminal of claim 3 wherein the outer pressure contacting end portion (32a) of said first contact member (32) is dome shaped to present a rounded convex contact surface (46) for engaging the first electrical device (50).

5. The electrical terminal of claim 1 wherein said biasing member comprises a coil spring (36) having one end engageable with the inner end portion (32b) of the first contact member (32) and an opposite end engageable with a bottom (38a) of the hole (38).

6. The electrical terminal of claim 1 wherein said inner end portion (32b) of the first contact member (32) and said hole (38) in the second contact member (34) are circular in cross-section.

8. The electrical terminal of claim 1 wherein said bearing flange comprises a peripheral bearing ring (42) about the second contact member (34).

9. The electrical terminal of claim 8 wherein said bearing ring (42) is located near the rear end (34b) of the second contact member (34).

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11. An electrical terminal (30) for mounting in an enclosed mounting cavity (54) in a first electrical device (50) with one open end (57), comprising:
a first contact member (32) having an outer pressure contacting end portion (32a) of a given diameter for pressure engaging a first electrical device (50) and an inner end portion (32b) of a diameter at least slightly larger than said given diameter, the outer pressure contacting end portion being dome shaped to present a rounded convex contact surface (46) for engaging the first electrical device;

a second contact member (34) having a front pressure contacting end (34a) for pressure engaging a second electrical device (62), a rear end (34b) having a hole (38) for reciprocally receiving the inner end portion of the first contact member, and a restricted stop (44) at the rear end of the hole for abutting the inner end portion of the first contact member to define an outer limit position of the first contact member, the outer pressure contacting end being dome shaped to present a rounded convex contact surface (48) for engaging the second electrical device;

said inner end portion (32b) of the first contact member (32) and said hole (38) in the second contact member (34) being circular in cross-section;

a coil spring (36) in said hole (38) in the second contact member and engageable with the inner end portion of the first contact member for resiliently biasing the first and second contact members in opposite directions; and

said first electrical device (50) including a housing (52) having the enclosed mounting cavity (54) with a fixed contact (56) at a base (54b) of the cavity opposite the open end (57), the rear end (34b) of the second contact member (34) being reciprocally mounted in the cavity with a bearing flange (42) slidably engageable with inner walls (54a) of the cavity, the pressure contacting end portion (32a) of the first contact member (32) being biased into engagement with the fixed contact at the base of the cavity, the pressure contacting end (34a) of the second contact member (34) projecting from the housing, and the cavity has a restricted stop (58) at an open end (57) thereof for abutting the bearing flange to define an outer limit position of the second contact member projecting from the housing.

Rule 1.126 11. The electrical terminal of claim 12 wherein said bearing flange comprises a peripheral bearing ring (42) about the second contact member (34).

12 14. The electrical terminal of claim 13 wherein said bearing ring (42) is located near the rear end (34b) of the second contact member (34).